DOCUMENT RESUME

ED 139 413 IR 004 788

AUTHOR Lowell, Howard P.
TITLE Oregon State Archives: Analysis of Conservation Needs and Procedures.
PUB DATE 1 Apr 77
NOTE 62p.

EDRS PRICE MF-$0.83 HC-$3.50 Plus Postage.
DESCRIPTORS *Archives; *Government Publications; *Preservation; State Action; Storage; United States History
IDENTIFIERS *Oregon

ABSTRACT

This report focuses on the earliest public records in the custody of Oregon, those documenting public actions during the Provisional and Territorial Government period, 1841-1859. It: (1) outlines the concern for preserving and making accessible Oregon public records; (2) examines the factors causing records to physically deteriorate; and (3) analyzes and makes suggestions for improving agency policies, procedures, and conditions relating to conservation of all archival resources, and specifically relating to physical preservation and intellectual control for Provisional and Territorial Government records. Included in the appendix are an item index and checklists for Provisional and Territorial Government records, material deterioration test results, cost estimates for reprocessing materials, and a select conservation bibliography. (Author/KP)

****
* Documents acquired by ERIC include many informal unpublished *
* materials not available from other sources. ERIC makes every effort *
* to obtain the best copy available. Nevertheless, items of marginal *
* reproducibility are often encountered and this affects the quality *
* of the microfiche and hardcopy reproductions ERIC makes available *
* via the ERIC Document Reproduction Service (EDRS). EDRS is not *
* responsible for the quality of the original document. Reproductions *
* supplied by EDRS are the best that can be made from the original. *
****

ED139413

U S DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

OREGON STATE ARCHIVES

Analysis of Conservation Needs and Procedures

Howard P. Lowell
April 1, 1977

IR004788

PREFACE

This report documents a three-month study of conservation needs and procedures at the Oregon State Archives. State Archivist James D. Porter initiated the project in response to a growing concern about the physical condition of records from the Provisional and Territorial Government period (1841 - 1859). Howard P. Lowell, a member of the Society of American Archivists Preservation Methods Committee, conducted the study.

Project objectives were to: (1) examine and analyze, in general, existing conditions and procedures affecting the physical preservation of permanently valuable documents in the Oregon State Archives; (2) recommend long- and short-term changes to improve these conditions; (3) examine, in detail, the physical state of, and existing conditions affecting, records from the Provisional and Territorial Government period; (4) recommend specific conservation actions, including cost estimates, needed to physically preserve these records; and (5) examine the arrangement and intellectual control for records of the Provisional and Territorial Government period suggesting changes and improvements.

The Archivist has a moral obligation to society to preserve evidence on how things actually happened and take every measure for the physical preservation of valuable records . . . He must guard them against defacement, alteration or theft; he must protect them against physical damage by fire or excessive exposure to light, damp and dryness; and he must take care to see that their evidentiary value is not impaired in the normal course of rehabilitation, arrangement and use.

Excerpted from
THE ARCHIVIST'S CODE

OREGON STATE ARCHIVES

Analysis of Conservation Needs and Procedures

The public records of Oregon establish and protect the public and private rights of its citizens and are evidence of the accountability of government to the people. They are essential in guaranteeing the orderly continuance of a democratic society. Oregon public records document the effectiveness of a responsible and responsive State government in meeting changing social, economic and political conditions. They reflect the organization, functions, policies, procedures, decisions and essential transactions of that government. Those public records appraised as being permanently valuable as the archives of the State have a continuing utility for understanding past public process and provide a unique, specialized body of knowledge for the logical, systematic and continuous development of public policy to meet the needs of the people.

Oregonians early recognized the fundamental need and responsibility of government to preserve and make accessible records documenting its transactions. At a March 6, 1843 public meeting, it was

> Resolved, That - The proceedings of this meeting be signed by the Chairman and Secretary and a copy of the Resolves etc etc be presented to the Recorder of this Colony -
>
> 1

The 8th Article of the Organic Law, adopted July 5, 1843, defined the duties of Recorder of the Provisional Government:

> There shall be a recorder . . . who shall keep a faithful record of the proceedings in the Legislative committee, supreme and probate courts, also record all boundaries of land presented for that purpose, all marks and brands used for marking livestock, procure and keep the standard weights and measures required by law, seal weights and measures, and keep a record of the same, and also record wills, Deeds and other instruments of writing required by law to be recorded . . . .
>
> 2

Legislation defining the duties of the Secretary of the Territory, approved by Governor George Abernethy August 15, 1845, included the requirements that

> He shall keep his office at the seat of Government . . . and shall have the safe keeping of the Seal of the Territory and of all public records, rolls, documents, acts, resolutions and orders of the House of Representatives. He shall keep a register of all commissions issued, and the official acts of the Governor, and when necessary attest the same. He shall also keep a book in which he shall record the official correspondence of the Governor.
>
> He shall make report and give information to the Governor or the House of Representatives respecting all matters referred to him by either, and the Governor, Judge of the Supreme Court, or any member of the House of Representatives shall have free accees to his office for the examination of the books, papers, records or documents therein contained, but no original paper shall be removed from his office except upon the official application of the Governor, Judge of the Supreme Court, or upon a resolution of the House of Representatives.
>
> 3

Later, on January 26, 1853, the Legislative Assembly of the Territory passed an act providing for the collection and publication of the laws and archives of Oregon. It commissioned L. F. Grover

> to collect and prepare for publication by the Territorial Printer, the laws, Journals, Governor's Messages and public papers of Oregon, from the earliest attempts to form a government upon the part of the inhabitants of Oregon down to and inclusive of the session of the Territorial Legislature held in the year 1849 , . . .
>
> Said laws shall be published in a separate Volume bound in strong paper with a complete index to the whole. Said Journals, Messages and public papers shall be published in a separate Volume bound in boards, with a complete index to the whole and arranged in chronological order to be styled the "Oregon Archives."
>
> There shall be published by the Territorial Printer as soon as practical one thousand copies of each of those Volumes, . . .

4

These early actions are indicative of a continuous series reflecting the concern of public officials for the management, preservation and accessibility of Oregon public records. This concern culminates in a State public records policy in which

(1) The Legislative Assembly finds that:

(a) The records of the state and its political subdivisions are so interrelated and interdependent, that the decision as to what records are retained or destroyed is a matter of state-wide public policy.

(b) The interest and concern of citizens in public records recognizes no jurisdictional boundaries, and extends to such records wherever they may be found in Oregon.

(c) As local programs become increasingly intergovernmental, the state and its political subdivisions have a responsibility to insure orderly retention and destruction of all public records, whether current or non-current, and to insure the preservation of public records of value for administrative,

legal and research purposes.

(2) The purpose of ORS 192.005 to 192.170 and 357.805 to 357.895 is to provide direction for the retention and destruction of public records in Oregon, and to assure the retention of records essential to meet the needs of the Legislative Assembly, the state, its political subdivisions and its citizens, in so far as the records affect the administration of government, legal rights and responsibilities, and the accumulation of information of value for research purposes of all kinds. All records not included in types described in this section shall be destroyed in accordance with the rules adopted by the Secretary of State.

5

The State Archivist, under the control and supervision of the Secretary of State, is responsible for administering the State public records policy. Part of this responsibility is to preserve for posterity the archives of the State. In this context, preservation has two meanings. First, it means preserving information contained in original records by creating a new physical media upon which that information is recorded. This may be accomplished by copying the original document by photoreproduction or other appropriate copying method and providing legal mechanisms for considering the copy as the original with the same uses and effect as the original. As an example, Oregon provides for deposit of copies of any public record with the State Archivist to insure preservation of the informational content in case the original, or an original photocopy, is lost, destroyed, mutilated or defaced.

6

The second meaning is actual preservation of the physical media upon which original information was recorded. This report analyzes conditions and procedures at the Oregon State Archives with respect to this second meaning as it applies to paper-formated records.

A more inclusive substitute for the term "preservation" is the term "conservation". Conservation of documentary resources encompasses: (1) those processes and actions which retard and control deterioration, a concept known as preventive conservation; (2) repair, which returns damaged material to a sound and usable condition; and (3) restoration, which returns damaged or deteriorated material to near original condition.[7] It includes the concept of phased preservation which relies on various intermediate actions to provide rapid stabilization of deteriorating material pending the development of effective mass treatments or employment of highly trained conservators to perform work for which no mass treatment is likely to be possible.[8]

Another term requiring definition is "permanent/durable". Permanent refers to the ability of paper, or other physical recording media, to retain its original strength and characteristics while resisting chemical action which may result from internal impurities or agents from surrounding air. Durable refers to its resistance to use and physical abuse over time.[9]

PHYSICAL DETERIORATION: Problem Scope and Causes

The factors causing paper and other physical recording media to deteriorate have been recognized for years.[10] It is the exponential increase in deterioration rates which has caused so much alarm during the past decade. George Cunha, Director of the New England Document Conservation Center, estimates that more damage took place in the five year span of 1970-1975 than occurred in a similar volume of record material during the entire 18th Century.[11] An Association of Research Libraries study estimates that better than 90% of the books published in the United States between 1900 and 1939 will be unusable by the year 2000 because of deteriorated bindings and paper.[12] William J. Barrow estimated that

97% of these books would have a useful life of 50 years or less.[13] The implication one draws from these estimates is that physical preservation of permanently valuable documentary resources is, and will continue to be, a major problem for library and archives administration, including the Oregon State Archives.

All physical media deteriorate with time through a natural aging process. This process can never be completely arrested but it can be slowed to the poin where it seems to be arrested. The causes for the deterioration process may b categorized as biological, physiochemical and mechanical acting independently or concurrently but with effects always closely interdependent. Natural disasters, such as fire or flood, are evident causes of records destruction. Other identified primary causes are:

Acid. The major reason paper deteriorates so quickly is acid which is often introduced during the manufacturing process. Major sources of acid in paper are alum/rosin compounds used as sizing agents, sulphur dioxide and nitrous oxide in polluted air, lignin in wood pulp, impure wood fibers (groundwood), residual bleaching agents and iron gall ink. Alum/rosin sizing and groundwood came into common use in paper manufacturing about 1850. Acid hydrolysis break down cellulose molecule chains and embrittles paper. Even small amounts can cause great damage. Acid migrates from paper to paper contaminating even those not originally contaminated. Deacidification is probably the most important process in preserving paper.

Light. Most light energy is converted to heat. The minute critical fraction which is absorbed by record material is the major light-related factor causing deterioration. Ultraviolet radiation from natural sunlight and fluorescent

light promotes oxidation of cellulose. Visible light, primarily at the blue end of the spectrum, also causes damage. This photo-oxidation process is aggravated by high temperature and air pollutants. It causes bleaching action which fades certain inks and colored paper and reacts with lignins to turn paper yellow or brownish. At the same time, fibers are broken into smaller and smaller units lessening the ability to maintain a strong bond. Leather is particularly susceptible to photo-sensitized oxidation. Harmful fluorescent and sunlight can be effectively screened with appropriate filters. Lighting levels should be maintained at 50 lux or lower in storage areas and as low as practical in areas where people work.

Heat and Moisture. Temperature cannot be considered independent of humidity and wide fluctuations in either cause material stress due to expansion and contraction and the movement of water. Generally, the lower the storage temperature, the longer paper will last. Theoretically, for every 10°F decrease, useful paper life doubles. Practical considerations dictate that storage temperature be 65°±F. Some archival storage facilities are now being designed to maintain a much lower constant temperature. If humidity is too high, it promotes mold and bacteria growth and accelerates acid deterioration; if too low, paper tends to desiccate. The ideal relative humidity for paper is 40-50%, for leather bindings 45-55%, for parchment and vellum 50-60%. The relative humidity of the air in direct contact with an object -- ambient humidity -- often varies considerably from that of the room. Humidity controlled to as close to 50%RH as possible is a suitable compromise for areas storing all these kinds of record material. Changes in temperature or relative humidity should not exceed 10°F or 15%RH. Installing a temperature and humidity control system is a sound conservation investment.

Air Pollution. Sulphur dioxide, hydrogen sulfide and nitrogen dioxide -- the by-products of combustion or chemical processes -- combine with atmospheric moisture to form acids. Ozone generated by the interaction of sunlight and automobile exhaust also causes the oxidation and embrittlement of paper. Particulate matter can cause abrasive action. Dust and grime in the presence of moisture act as a corrosive poultice because of acid droplettes which form around the dirt particles. Most of these atmospheric pollutants are found in various quantities in the Willamette Valley. For example, Salem exceeded the Oregon Standard for sulphur dioxide during a 24-hour period twelve times in 1975.[14] Installing an air filtration system (other than an electrostatic one) which utilizes, for example, charcoal filters or an alkaline water spray is another sound conservation investment especially if done in conjunction with the temperature and humidity control system.

Fungi. Mold spores are always present and can begin to grow rapidly above 80°F and 70%RH in stagnant air. Fungi degrade cellulose and cause stains and discoloration. Fumigation is the only efficient remedy for advanced cases and records should be fumigated prior to introduction into the archives or records center should mold or vermin infestation be suspected.

Vermin. Rodents and insects such as silverfish, cockroaches and larder beetles (bookworms) often thrive in archival repositories feeding on cellulose starches and gelatins. High temperatures and humidity favor their propagation Good housekeeping procedures are the best preventive remedy.

People. Users and staff pose the single greatest threat to the physical survival of records because of planned or inadvertent destructive actions, or because of our inaction. Implementing a preventive conservation policy, inclu substituting reference microfilm for fragile originals, formulating a disaster

and promulgating conservation-oriented regulations and procedures, is a logical first step for coping with deteriorating record resources.

General Environmental Conditions
Oregon State Archives

The project researcher first conducted a general survey to relate the factors known to cause physical deterioration of record material to existing conditions at the Oregon State Archives. The survey consisted of: (1) several "walk-thru" inspections using the survey outline and format employed by the New England Document Conservation Center in conducting conservation surveys; (2) discussions with Oregon State Archives staff; and (3) tests to confirm conclusions drawn from visual observations. For the purposes of this report, conclusions are limited to observations made in storage areas at the main and basement levels. The other stack levels, for the most part, store documents of records center quality, i.e. less than permanent value. Many observations are germane to these areas as well.

The following conditions were noted during "walk-thrus" or in staff discussions:

(1) fluorescent lights and windows are not shielded;

(2) there is considerable variation in temperature and humidity during the course of a year in all but the environmentally controlled storage areas;

(3) there is evidence of smoking and consumption of food and beverage in stack, Search Room and processing areas;

(4) there is some evidence of insect and rodent problems;

(5) basement level stack area is used for storage of material other than records;

(6) janitorial supplies and chemicals are stored in the closet, basement level stack area;

(7) fire control is by sprinkler system, water hoses and chemical extinguishers;

(8) doors leading to stack areas are not locked;

(9) most archives are stored in acid-contaminated records center boxes, and many documents are filed in acid-contaminated folders and show signs of acid deterioration;

(10) stack areas are relatively dirt-free;

(11) there is some evidence of water leak problems through walls and from overhead pipes;

(12) bound volumes of printed laws, etc. in Search Room require restoration attention;

(13) some unprocessed archives (large volumes) are stored on pallets placed on the floor;

(14) many bound records have broken spines and are shelved in such a manner to cause bindings to break;

(15) some documents need to be unfolded, flattened and reboxed; and

(16) a significant portion of the archives holdings requires conservation attention.

From these observations, I suggest the following short-term actions:

(1) assign a staff member responsibility for conservation. The archivist designated should have the organizational status and authority to initiate preventive conservation measures, plan security and emergency procedures, monitor and modify as necessary the building environment and create conservation awareness while training other staff in simple preventive conservation procedures;

(2) provide opportunities for this staff member to attend conservation workshops and seminars to learn simple repair procedures from professional conservators in a "hands-on" experience;

(3) develop a long-range conservation plan for the Oregon State Archives to include the permanently valuable records of all levels of government in Oregon;

(4) purchase and install filters to eliminate harmful light rays (see appendix for cost estimate);

(5) develop and promulgate regulations governing conservation in the Search Room, stacks and processing area (see appendix for suggested regulations);

(6) contract with Society of American Archivists for Security Consultant Service program (cost is travel, room and board for two days);

(7) use acid-free folders and containers for processing new archival accessions;

(8) begin a program for treatment of leather bound volumes (following procedures outlined by Carolyn Horton -- see appendix for bibliographic citation);

(9) develop a disaster plan and procedures to follow in case of fire or water damage in the Oregon State Archives or in the offices of any agency of the state or its political subdivisions;

(10) install case hardened center, fire tumbler cylinder, one and one half inch dead bolt locks for all stack area doors and keep doors locked at all times (see January, 1977 SAA Newsletter, page 7, for procedures for securing doors with exterior hinges);

(11) eliminate storage of old boxes, supplies, etc. in archives storage areas; and

(12) consolidate archives in specifically designated areas apart from records center storage.

I also suggest the following long-term actions:

(1) rebox and refolder all archives now in acid-contaminated containers using acid-free materials;

(2) employ a conservation technician and establish a conservation laboratory to meet "in-house" needs (see appendix for cost estimate);

(3) install an integrated air conditioning/humidity control system in all areas of the building in which records are stored or used;

(4) install smoke detectors and water sensors throughout the building -- attach to central alarm system connected to local fire and/or police;

(5) work with purchasing authorities to provide permanent/durable materials for agencies creating records series identified as being permanently valuable;

(6) amend law to specifically define State Archivist's authority for records conservation (see appendix for suggested amendment); and

(7) work with other individuals and organizations in the Northwest to provide a regional documents conservation center modeled after those in Ohio and New England.

PROVISIONAL AND TERRITORIAL GOVERNMENT RECORDS

The records of the Provisional and Territorial Government period (1841 - 1859), designated as Record Group P-9, are the earliest public records found in the Oregon State Archives. This record group documents the creation and development of organized government in Oregon prior to statehood. A few items from the estate of Ewing Young pre-date 1841; the oldest record is the Agreement of the Willamette Cattle Company dated January 13, 1837. Lack of administrative provisions to settle Young's large estate following his death in 1841 was an initiating cause leading to the formation of the Provisional Government.[15]

Record Group P-9 consists of 12,425± documents. A numerical sequence arrangement arbitrarily imposed at some time after records creation roughly groups the documents by type and age, but there is neither an internal functio nor chronological consistency within the total numerical array. 12,281 items

appear on an inventory prepared in 1931. Additional documents are numbered in the 13,000's and 14,000's, but with large numerical gaps in the sequence. The array ends with unnumbered documents. An inventory of items after #12,281 is appended. Additional records which document activities of the Provisional and Territorial Government are missing or extant in other repositories. Significant gaps in the public record exist.

Available finding aids are: (1) the numerical sequence item inventory prepared at the time of transfer from the Secretary of State to the Oregon Historical Society in 1931 which consists of 148 typed legal-size pages -- a carbon copy is retained in the Oregon State Archives and duplicated at the end of the final reel of the OHS microfilm reference copy; (2) a microfilm name and subject index which the Oregon Historical Society prepared through a SERA project during the Society's custodianship (6 reels) -- the original card file is at OHS; (3) an incomplete calendar prepared in card format by the Oregon State Archives which describes the first 2,500± numbered documents; and (4) a typed checklist to all recorded public meetings and legislative sessions in Oregon between 1841 and January, 1859, excluding those of the State Legislature in 1858. The Oregon Historical Society microfilmed the documents in its custody prior to returning them to the State (28 reels) and Oregon State Archives has a positive copy for researcher use.

That the public record of this period is even partially preserved is no small miracle considering the care and travel of these documents during the past 120± years. In 1878, J. Henry Brown reported to the historian H. H. Bancroft that "The papers of the Provisional Government are packed up loose in boxes without any system, not sorted or arranged according to the dates and subjects as they should be."[16] Two years later the Secretary of State reported, "The

records of the provisional and territorial governments have been indexed and placed in suitable cases for better preservation."[17] But in 1899 another Secretary of State found that "The records during the provisional period are very incomplete and not indexed or arranged in any system."[18]

The Legislative Assembly formally showed its concern for the security and preservation of the Provisional and Territorial Government records in 191 A House Concurrent Resolution filed with the Secretary of State on March 4 authorized him to transfer the records to the Oregon Historical Society for permanent safekeeping.[19] Apparently the Secretary did not act for it was not until February 27, 1931 when the Governor signed into law "AN ACT to provide for the transfer of certain documents relating to the history of Oregon now in the custody of the secretary of state to the Oregon Historical Society for safekeeping" that transfer procedures were initiated.[20] At the time the Legislative Assembly was considering this legislation, the Sunday Oregonian reported

> Few persons realize that today one of the greatest collections of historical documents in the Pacific Northwest repose in 15 wooden boxes in the basement of the state capitol in Salem without other fire protection than the grace of God, good fortune, a few fire hoses and a night watchman.[21]

This 1931 legislation provided in its single section

> That the secretary of state be and he hereby is authorized and directed to deliver to the Oregon Historical Society, as trustee of the State of Oregon, for safekeeping, all documents, letters, reports, journals, proceedings of the public meetings held at the Oregon institute at Champoeg and other places for the purpose of forming an organized government, census

> reports, messages, petitions, court proceedings, election returns, engrossed and enrolled bills and all legislative documents relating to the political history of the provisional government prior to March 2, 1849, and the territorial government of the territory of Oregon prior to February 14, 1859, now in the custody of the secretary of state, taking a general receipt of the secretary of the Oregon Historical Society therefor; provided, however, that when in the judgment of the Oregon state board of control suitable fireproof vaults are available in the capitol building group in Salem, Oregon, all of such documents shall, upon order of the said Oregon state board of control, be returned to the secretary of state and by him deposited in the room or vaults provided for such records.[22]

The Secretary of State duly transferred these public records to Oregon Historical Society where they remained until the Oregon State Board of Control voted unanimously on November 27, 1951 to have the Provisional and Territorial Government records returned to Salem.[23] At that time the Oregonian quoted OHS President Francis Lambert as stating that the records were housed in "what amounts to a reinforced concrete vault behind a fire door in the Portland auditorium."[24] The Society returned the documents to Salem on April 18, 1952 and on April 23 the State Archivist officially requested them for transfer from the Secretary of State for permanent care and preservation.[25]

Provisional and Territorial Government Records -- Physical Condition

Record Group P-9 remains, on the whole, in good physical condition considering its history of storage and use under less than optimal conditions for preservation. Credit is due Oregon Historical Society which, during its custodianship, unfolded the documents and placed them in envelopes. However,

the entire record group now requires conservation attention on an item-by-ite basis, and many individual items require the restoration expertise of a professional conservator.

The records of the Provisional and Territorial Government are in two four-drawer legal fire-insulated file cabinets in an environmentally controlled room adjacent to the main archives stack area. The fire-insulated rating is one hour; environmental control settings are 68° - 74°F and 40%+RH. Actual conditions in the storage area do not conform to the humidity control setting. Within the file cabinets most documents are in legal-size envelopes with glued flaps; a few are in legal-size file folders. Tests indicate that acid is present in significant quantities in both envelopes and folders.

The physical condition of the records was determined for this report by (1) visual observation of storage facilities and equipment; (2) cursory examination of all documents during the process of reordering them in correct numerical sequence; (3) a more detailed visual inspection of documents with obvious repair needs; and (4) limited testing to verify conclusions drawn from visual inspection. The degree of intellectual control and its effectiv for reference use was determined by analysis of existing finding aids and th application to specific series, subject matter, etc.

From this examination process, the following conditions were noted. Numbers in parenthesis indicate documents which are examples of the conditio cited.

With respect to physical conditions and needs:

(1) there is a variety of paper and recording media (inks, pencil, etc.) even within one document (666; 3821; 9095);

(2) many documents are weak at fold points and corners with tears requiring mends (5807; 1087; 3677);

(3) many documents are dirty and some staining is evident (654; 6325 - 6327);

(4) some tears were previously repaired with "scotch" tape and need corrective restoration (442; 1381; 2949; 4768; 11775; 12195);

(5) many documents (especially petitions) consist of pages attached to each other in a manner which produces large and odd-shaped sizes (6848 - 6883); others are small, irregular shaped pieces resulting from larger sheets being torn to conserve paper (3030 - 3086);

(6) a few documents have seals which may require special handling (1917; 2052; 4487; 5558; 9395);

(7) there is minimal evidence of foxing;

(8) there is much evidence of careless handling (2040; 2418; 6208) and some of mutilation (11918);

(9) there is some evidence of advanced acid deterioration (1350) and many indications of potentially serious acid problems which will require deacidification (2733; 2449; 2870; 4363). There is also evidence of iron gall ink reacting with paper (2348; 2559) and acid migration (12663 - 12668);

(10) several oversized documents pose special storage problems (5304; 5352; 5390 - 5395);

(11) much physical damage has been caused by crowding documents in envelopes and envelopes in file cabinets;

(12) paper clips have caused several tears and left rust marks; and

(13) the 1931 transfer inventory -- the primary finding aid -- is itself a deteriorating document requiring conservation attention.

With respect to intellectual control:

(1) the documents were often misfiled both within and among envelopes -- this condition was corrected during the examination process;

(2) the 1931 transfer inventory does not adequately describe some documents -- for example, the descriptor "resolution" appears without date or subject indication;

(3) several items clipped to other documents (such as amendments to bills) appear not to be related to the attached -- some attached items are numbered with the same numerical designation as the host documents -- others are unnumbered;

(4) the subject index (microfilm) is limited in scope and incomplete -- often it refers to certain documents on a subject without referring to others -- for example, the petitions for pardon of Nimrod O'Kelley are correctly identified as 5490 - 5537, but 10757 which concerns this action is not listed;

(5) the calendar is only 20%+ completed;

(6) the 1931 transfer inventory is sometimes misleading and confusing in terms of identifying miscellaneous items -- for example, 848, 6355 - 6361, 6481 - 6488, 10120 - 10221, 10354 - 10370 and 10599 - 10611 are correctly identified as bills for services provided to the Oregon Penitentiary -- 5816 - 5938 and 10401 are also bills for services to the Penitentiary but these are grouped with other documents under the heading "Miscellaneous Bills"; and

(7) the microfilmed copy of the 1931 transfer inventory appears at the end of the final reel of reference film for the record group.

A great number of records from the Provisional and Territorial Governme period require no sophisticated repair or restoration treatment and will not the future given proper care and handling. Others, such as "AN ACT to estab a Territorial Government in Oregon" (2742), "A Bill to Incorporate the City Portland" (2743), "Minutes of the Convention of 1857" (7441) and the letter from Governor Curry to the President of the United States transmitting a certified copy of the Constitution adopted November 9, 1859 (8312), need a professional conservator's attention. The books and papers relating to the estate of Cornelius Rogers (2446 - 2555) are examples of the variety of

problems for which repair and restoration is required.

The following documents appear to be missing: 273; 373; 826; 1691; 1702; 3344; 4375; 9234; 13001 and 13009. All except 9234, 13001 and 13009 are recorded on the reference microfilm copy.

Examination of RG P-9 suggests the following actions to help insure the physical survival of all documents comprising the public record of the Provisional and Territorial Government period and to improve researcher access to the information which they contain. I recommend that no action be taken which rearranges the documents from their current numerical sequence. This arbitrarily imposed sequence itself tells much about past actions and attitudes of public and private custodians toward them. Any "rearrangement" should be by developing additional finding aids keyed to this sequential numbering system.

With respect to physical preservation, I suggest that:

(1) the records be removed from current storage envelopes and refiled in acid-free file folders. Folders should be placed in Hollinger boxes and shelved in the environmentally controlled area, preferably so records lie parallel rather than stand perpendicular to the shelf, but in any case so the weight of the record is borne by the folder and not the edge of the document. File folders are suggested in place of acid-free envelopes because the current practice of sliding documents into envelopes is causing much wear and tear. A general rule of thumb is ten-fifteen documents per file folder and ten folders per container. Extremely fragile documents should be mylar encapsulated using the Library of Congress method. This action provides strength but will not lessen acid deterioration unless the document is deacidified prior to encapsulation. Care should be taken to place materials logically within folders in order to facilitate reference use (1124 - 1131) and limit documents containing loose pages to one per folder in cases where enclosing additional documents would confuse internal relationships (1668; 2636). Folders should be labeled to show inclusive document numbers and number of items (pages) to facilitate security checking. Archival boxes should be labeled to show inclusive document numbers (see appendix for cost estimates);

(2) reference microfilm be substituted for originals for Search Room use except in special circumstances where examination of the original is warranted;

(3) old envelopes and other non-record material be discarded;

(4) use of metal paper clips and staples be discontinued;

(5) special storage containers for oversized documents be used;

(6) documents not on OHS microfilm be filmed;

(7) relative humidity in environmentally controlled storage area be 45% and temperature be 65°F;

(8) dehumidification equipment be installed to control relative humidity more precisely in this storage area; and

(9) the concept of phased preservation be applied to these records. Identify those requiring immediate restoration attention and arrange, within budget limitations, for this work to be done by a competent, professional conservation laboratory. This action will be required for only those few documents which are valuable both for informational content and as an artifact, and which are seriously deteriorated. Identify other documents requiring restoration attention and establish priorities for this work as professional conservation expertise and/or mass treatments become available. Monitor the physical condition on a sample basis each year and reassess restoration priorities on this new data.

With respect to improving intellectual control and user access to information, I suggest that:

(1) the 1931 transfer inventory be completed, modified and provide additional information where necessary, then reproduced and made available to researchers as the primary finding aid (see appendix for cost estimate);

(2) a brochure describing the Provisional and Territorial Government records, other public record holdings from this time period, and available finding aids be prepared and widely distributed;

(3) consideration be given to securing grant monies to complete the calendar as an additional secondary processing activity (see appendix). Because of the time and manpower required to produce this type of finding aid, money and staff should not be diverted from other OSA projects in order to complete this finding aid. Finding aid production in machine-readable format should be explored;

(4) checklists be produced identifying certain series or other document groupings such as Legislative Acts or Resolves for all sessions, records relating to the Penitentiary, etc. (see appendix for samples);

(5) completed finding aids be shared with other appropriate repositories throughout the Northwest; and

(6) OSA be more active in coordinating with the academic and research community to train researchers in the use of archives and the role of archivists in the research process.

SUMMARY

Nearly a decade ago Frazer G. Poole, Preservation Officer for the Library of Congress, identified preservation of materials as one of our major problems and added, "the problem is likely to become significantly worse before it improves."[26] Poole's observation has proven to be true. Preservation is a problem of enormous proportions which archivists must face if we are to fulfill our responsibility to preserve permanently valuable information and, when applicable, the original physical artifact upon which it was recorded.

This report focuses on the earliest public records in the custody of the State, those documenting public actions taken during the Provisional and Territorial Government period. In doing so, it: (1) outlines the concern of Oregonians for preserving and making accessible their public records; (2) examines the factors causing record material to physically deteriorate; and (3) analyzes, and makes suggestions for improving agency policies, procedures and conditions as they relate to conservation of all archival resources and specifically as they relate to the physical preservation and intellectual control for the records of the Provisional and Territorial Government. These records are less than 150 years old, and yet some are physically deteriorated to a point where their continued use for research is questionable. And these are permanent records.

This situation is indicative of the conservation challenge which the Oregon State Archives faces in carrying out this requirement of its statutory and professional responsibility. The need for a state-wide policy and program for an active effort to preserve permanently valuable documentary resources in Oregon is real. Oregon State Archives stands in a position to lead this effort. The actions I suggest in this report are intended only as a starting point.

FOOTNOTES

[1] Oregon State Archives, Record Group P-9, "Records of the Provisional and Territorial Government of Oregon," Document #341.

[2] Ibid., #1582.

[3] Ibid., #1190.

[4] Ibid., #4619, #4620.

[5] Oregon Revised Statutes, 192.001.

[6] Ibid., 357.865.

[7] Frazer G. Poole, "Preservation," in Archives-Library Relations, ed. by Robert L. Clark, Jr. (New York: R.R. Bowker, 1976), 141.

[8] Ibid., 150.

[9] George M. Cunha and Dorothy Grant Cunha, Conservation of Library Materials, I (Metchuen, N.J.: Scarecrow Press, 1971), 34; George M. Cunha and Norman Tucker, Library and Archives Conservation (Boston: The Boston Athenaeum, 1972), 41.

[10] In 1888 the English typographer William Blades in The Enemies of Libraries, (London: Elliott Stock, 1888), identified the causes as fire, water, gas and heat, dust, ignorance and bigotry, bookworms, bookbinders, collectors, servants and children.

[11] Permanence/Durability of the Book - VII: Physical and Chemical Properties of Book Papers, 1509 - 1949 (Richmond, Virginia: W.J. Barrow Research Laboratory, Inc., 1974), 32.

[12] Gordon Williams, "The Preservation of Deteriorating Books," Library Journal 91 (January 1, 1966), 54.

[13] Poole, Some Aspects of Conservation Problems in Archives (unpublished paper presented at SAA/NEH Conference of Priorities for Funding, Chicago, January 6-8, 1977), 3.

[14] Oregon Department of Environmental Quality - Air Quality Division, Oregon Air Quality Report 1975 (Portland: DEQ, October 1, 1976), 42-45.

[15] Leslie M. Scott, "Oregon's Provisional Government," Oregon Historical Quarterly 30 (September, 1929), 210-211; Kent D. Richards, "The Methodists and the Formation of the Oregon Provisional Government," Pacific Northwest Quarterly 61 (April, 1970), 89-90.

[16] David C. Duniway and Neil R. Riggs, eds., "The Oregon Archives, 1841 Oregon Historical Quarterly 60 (June, 1959), 213.

[17] Oregon Secretary of State, Biennial Report of the Secretary of State the Legislative Assembly, 1880, xv.

[18] Secretary of State, Biennial Report, 1899, 190.

[19] Oregon Legislative Assembly, 27th Regular Session, House Concurrent Resolution No. 31, filed with the Secretary of State, March 4, 1913.

[20] Oregon Laws, 1931, c.85.

[21] Edward M. Miller, "Priceless Documents Face Fire Menance at State Capitol," Sunday Oregonian, February 22, 1931, Section 4, 4.

[22] Laws, 1931, c.85, § 1.

[23] Oregon State Board of Control, Minutes, November 27, 1951.

[24] "Holders Favor Archives Use," Oregonian, December 6, 1951, 14.

[25] Oregon State Archives, Requisition of Records for Transfer dated Apr 1952 address to Earl Newbry, Secretary of State.

[26] Poole, "Preservation and Cost Standards," Special Libraries 59 (Octo 1968), 614.

APPENDIX

ITEM INVENTORY - Provisional and Territorial Government Records
(RG-P9)

13000 - Contingency Account, Governor Curry, 1858
13001 - Appointment of Frederick Prigg as District Court Judge, Klackamas, 1845
13002 - Appointment of O. C. Matley, Sheriff, Clatsop County, 1847
13003 - Frederick Prigg, Secretary of Oregon Territory, Receipt for payment for advertisement of "An Act to Prevent Desertion" in Polynesian (Honolulu), May 29, 1847
13004 - Resolution to require Governor to published laws passed in Oregon Spectator
13005 - Letter from James J. Jarvis, editor Polynesian to Frederick Prigg, Secretary of the Territory, May 29, 1847 re: advertisement
13006 - Plans, specifications and contract for jail at Oregon City, 1845
13007 - Henry Maxwell, citizenship paper, n.d.
13008 - Andrew Olson, citizenship paper, (February, 1853) -- a true copy attested to by Joh H. Lines, February 24, 1854
13009 - Joel Palmer, Order re: Regulations for Indians, October 13, 1855
13012 - Poll Book, Dallas -- Special Election, October, 1856
14001 - Assessment Roll, Benton County, 1855
14002 - Assessment Roll, Benton County, 1856
14011 - Duplicate receipt, William Homes, Sheriff, Clackamas County, 1851
14012 - Receipt, Robert Canfield, Treasurer, Clackamas County, October 23, 1852
14013 - Treasurer's Report, Clackamas County dated September 16, 1852 for Territorial Funds received from the Collector, October 11, 1850 to March 27, 1852
14014 - Account of Poll, Territorial, County and Jail Tax, Clackamas County, 1853
14015 - Account of Territorial, School, County and Poll Tax, Clackamas County, 1854
14021 - Account of Territorial Tax, Clatsop County, 1851 and 1852
14022 - Assessment and Tax List, Clatsop County, September 27, 1853
14023 - Assessment Roll, Clatsop County, 1854
14024 - Assessment Roll, Clatsop County, 1855
14026 - Assessment Roll, Clatsop County, 1856
14027 - Assessment Roll, Clatsop County, 1857
14028 - Assessment Roll, Clatsop County, 1858
14029 - Assessment Roll, Clatsop County, 1859
14031 - Assessment Roll, Columbia County, 1854
14032 - Assessment Roll, Columbia County, 1855
14033 - Assessment Roll, Columbia County, 1856
14034 - Assessment Roll, Columbia County, 1857
14035 - Assessment Roll, Columbia County, 1858
14036 - Assessment Roll, Columbia County, 1859
14041 - Assessment Roll, Coos County, 1854
14042 - Assessment Roll, Coos County, 1855
14043 - Assessment Roll, Coos County, 1856
14044 - Assessment Roll, Coos County, 1858
14045 - Assessment Roll, Coos County, 1859
14046 - Assessment Roll, Coos County, 1857
14051 - Assessment Roll, Curry County, 1857
14052 - Assessment Roll, Curry County, 1858

14053 - Assessment Roll, Curry County, 1859
14061 - Statement of China Miner's Tax Collected, Douglas County, 1858
14062 - Assessment Roll, Douglas County, 1854
14063 - Account of Territorial, School and County Tax, Douglas County, 1855
14071 - Statement of Licenses sold to Chinamen, Jackson County, 1857
14072 - Assessment Roll, Jackson County, 1856
14081 - Assessment Roll, Josephine County, 1857
14082 - Assessment Roll, Josephine County, 1858
14083 - Assessment Roll, Josephine County, 1859
14091 - Assessment Roll, Lane County, 1853
14092 - Assessment Roll, Lane County, 1854
14093 - Assessment Roll, Lane County, 1855
14096 - Assessment Roll, Lane County, 1857
14097 - Assessment Roll, Lane County, 1858
14098 - Assessment Roll, Lane County, 1859
14101 - Receipt, A.B. Dillenbaugh, Sheriff, Lewis County, 1852
14102 - Duplicate receipt, Treasurer, Lewis County, 1852
14103 - Receipt, Wm. J. Herren, Sheriff, Marion County, 1853
14104 - Duplicate receipt, William J. Herren, 1853
14105 - Assessment Roll, Lewis County, 1850
14106 - Assessor's Book, 1852 (Pacific City and Chinook City)
14111 - Assessment Roll, Linn County, 1851
14112 - Assessment Roll, Linn County, 1852
14113 - Assessment Roll, Linn County, 1854
14114 - Assessment Roll, Linn County, 1856 (bound)
14115 - Certificate of Taxable Property, Linn County, 1855
14116 - Certificate of Taxable Property, Linn County, 1856
14121 - Assessment Roll, Linn County, 1857 (bound)
14122 - Assessment Roll, Linn County, 1858
14131 - Assessment Roll, Linn County, 1859
14145 - Statement of Delinquent Taxes, Marion County, 1853
14146 - Statement of Territorial Tax, Marion County, 1853
14151 - Assessment Roll, Pacific County, 1853 (partial document)
14161 - Assessment Roll, Polk County, 1856
14162 - Assessment Roll, Polk County, 1857
14163 - Assessment Roll, Polk County, 1858
14164 - Assessment Roll, Polk County, 1859
14171 - Statement of Legislative appropriation for the relief of Polk County, 1853
14172 - Assessment Roll, Polk County, 1850
14173 - Assessment Roll, Polk County, 1851
14174 - Assessment Roll, Polk County, 1852
14175 - Statement of Delinquent Taxes, Polk County, 1852
14176 - Assessment Roll, Polk County, 1853
14177 - Statement of Gross Assessment and Delinquent Taxes, Polk County, 18
14178 - Assessment Roll, Polk County, 1854
14181 - Assessment Roll, Thurston County, 1852
14182 - Tax List, Thurston County, 1852
14191 - Assessment Roll, Tillamook County, 1860
14192 - Assessment Roll, Tillamook County, 1859

14193 - Assessment Roll, Tillamook County, 1857
14194 - Assessment Roll, Tillamook County, 1855
14195 - Assessment Roll, Tillamook County, 1854
14196 - Assessment Roll, Tillamook County, 1859
14211 - Abstract of Assessment Rolls, Yamhill County, 1856

Documents Not Numbered

Territorial Secretary Fee Book Aug 21, 1845 - Nov 27, 1848. Includes commissions issued, resignations, 1847 (and commissions, 1848). 1 vol.

Land Claim Records, July 31, 1845 - Sept. 1849. 8 vols. plus indexes and one folder miscellaneous documents.

Accounts Aug 1853 - July 1854; Feb 22 - July 28, 1855. 1 vol.

Copies of letters sent Oct 2, 1854 - June 30, 1856. 1 vol.

Copies of letters sent 1853 - 1859. 1 vol.

From Adjutant General

Folder #1 - Acts and Resolves of Territorial Legislature including AN ACT to provide for settlement of the debt of the Oregon Government growing out of the Cayuse War (also portion of bill from later period re: taxes)

Folder #2 - Oath of Capt. Wm. Martin to support Organic Laws of the Provisional Government, Sept. 28, 1848

- Appointment of Benjamin F. Birch, Adjutant of the First Oregon Riflemen, March 10, 1848

Folder #3 - Abstracts of Compensation for Marshals for attendance at District Court, various counties, ca 1856 - 1858

Folder #4 - Abstracts for compensation of jurors and witnesses, District Court, various counties, ca 1856 - 1858

Folder #5 - Receipts, ca 1844 (11 items)

- Health statement for Thomas Ramey signed by P. Welch, August 12, 18

- Appointment of Frederick Prigg, Judge of District Court, Klackamas, Sept 3, 1845

- Appointment of Wm. H. Bennett, (no position, n.d.)

Folder #6 - Receipts, 1855 (9 items)

- Statement of property attachment against Horatio N. Winslow, Nov. 8, 1849

Folder #7 - Notebook on political issues and record of certificates of service, ca. 1860

Folder #8 - Receipt for H. A. G. Lee for Oregon Spectator, March 1, 1847

- Day Book August, 1846 - June, 1847

Folder #9 - Muster Roll, 2nd Regiment Washington Territory Volunteers, June 2, 1856 - Sept. 29, 1856

Folder #10 - Petition to charter Mutual Insurance Company for protection of property against the dangers of fire

Folder #11 - Broadside re: reward for deserters from U.S. Schooner Shark, August 11, 1846

Folder #12 - Resolution of House of Representatives from Directors of Oregon Printing Association (J. E. Long, Chairman), December 15, 1845 re: publishing laws on one page in paper printed by Oregon Printing Association for fee of $300 per annum

---

2 folders of public documents from statehood period

OREGON STATE ARCHIVES

RECORDS OF THE
PROVISIONAL & TERRITORIAL GOVERNMENTS
Record Group P-9

Checklist for Census Enumerations and Abstracts

This checklist identifies census information which Oregon officials filed with the Provisional or Territorial Government and which is now in the Oregon State Archives. Records are cited by county of origin, date and document number (in parenthesis). For information on the formation of new counties from the original four districts the Provisional Government established July 5, 1843, see: Lewis A. McArthur. Oregon Geographic Names 4th ed. (Portland: Oregon Historical Society, 1974). A copy is available for use in the Search Room.

Benton -- established December 23, 1847

1853 (5289)
1855 (7091)
1856 (6904)
1857 (7996)

Champoeg -- established July 5, 1843
name changed to Marion, September 3, 1849

1845 (12194)
1849 (1078)
1853 (5287)
1854 (5572)
1855 (7089)
1856 (6916)
1857 (7994)

Clackamas -- established July 5, 1843

1845 (12194)
1849 (3452)
1853 (5288)
1856 (6913)
1857 (7990)

Clark -- established September 3, 1849

see: Vancouver

Clatsop -- established June 22, 1844

1845 (12194)
1849 (1080)
1854 (5567)
1856 (6909)
1857 (7989)

Coos -- established December 22, 1853

1855 (6384)
1856 (6910)
1857 (7997)

Curry -- established December 18, 1855

1856 (6906)
1857 (7988)

Douglas -- established January 7, 1852

1854 (5568)
1855 (6383)
1857 (7992)

Jackson -- established January 12, 1852

1854 (12281)
1856 (6911)

Josephine -- established January 22, 1856

1856 (6907)

Lane -- established January 28, 1851

1853 (5281)
1854 (5571)
1855 (6385)
1856 (6908)

Lewis -- established December 21, 1845

1849 (1082)

Linn -- established December 28, 1847

1849 (1082-1/2)
1853 (5283)
1854 (5569)
1855 (7087)
1856 (5569)
1857 (7995)

Marion -- established September 3, 1849

see: Champoeg

Multnomah -- established December 22, 1854

1856 (6902)
1857 (7998)

Polk -- established December 22, 1845

1846 (3453)
1849 (1079)
1853 (5282)
1856 (6912)

Tillamook -- established December 15, 1853

1854 (5570)
1855 (7088)
1857 (7993)

Twality -- established July 5, 1843
name changed to Washington, September 3, 1849

1845 (12193)
1849 (3451)
1850 (3450)
1853 (5290)
1856 (6914)
1857 (7987)

Umpqua -- established January 24, 1851

1853 (5285)
1855 (7090)
1857 (7991; 12278)

Vancouver -- established August 20, 1845
name changed to Clark, September 3, 1849

1849 (3455)
1853 (5386)

Washington -- established September 3, 1849

see: Twality

Yamhill -- established July 5, 1843

1845 (12193)
1846 (3453)
1849 (1081; 3454)
1853 (5284)
1855 (6333)
1856 (6903)

Related Documents

Bill to provide for taking the census (3697)
HB 79 to provide for taking a census (4460)
HB 121 to provide for taking the census of Oregon (7294)
An Act authorizing the taking of the Cenus of Oregon for 1845 (1402)
An Act to provide for taking the census, 1846 (1283)
A Bill to provide for taking the census for 1848 (1092)
HB 47 to provide for taking a Territorial Census, 1853 (3925)
CB 71 for taking census of Oregon, 1854 (6659; 7294)
HB 80 to provide for taking the census of Oregon, 1857 (7811-7812)
HB 80 An act to amend an act entitled an act to provide for taking an enumeration of the inhabitants of Oregon (8573)
Oath of J. L. Meek, Sheriff, re: Census, 1845 (12206)
Bond of J. L. Meek covering taking the Census, 1845 (12208)
List of appointments to take the census, 1849 (2610)
Wm Holmes, census enumerator, 1849 (2612)
Oath of Wm Homes, census enumerator (3122)
Letter from Joseph Lane to Superintendent of the Census dated June 20, 1853 (10745)
Report on the Committee on Census (3052)

OREGON STATE ARCHIVES

RECORDS OF THE
PROVISIONAL & TERRITORIAL GOVERNMENTS

Record Group P-9

Checklist for Records Relating to Incorporation of Religious Societies

This checklist identifies legislative documents which record the incorporation of religious societies during the Territorial period and which are now preserved in the Oregon State Archives. Documents are cited by number (in parenthesis).

HB 41 -- An Act to Incorporate Literary and Religious Societies -- passed by House, January 28, 1851; by Council, February 1, 1851. (2746)

HB 103 -- Enrolled Copy -- An Act to Regulate Incorporation of Religious Societies -- passed by House, January 27, 1855; by Council, January 20, 1855. (6179)

An Act to Incorporate the Trustees of the Methodist Episcopal Church in Oregon City -- passed by House, May 17, 1850; by Council, May 17, 1850. (3635)
Enrolled copy filed May 19, 1850. (3441)

HB 48 -- An Act to Incorporate the First Congregational Society of Portland -- passed by House, January 29, 1851; by Council, February 1, 1851. (2744)
HB 48 -- Enrolled copy filed February 8, 1851. (4162)

HB 58 -- An Act to Incorporate the First Presbyterian Society of Clatsop Plains -- passed by House, February 3, 1851; by Council, February 5, 1851. (2771)
HB 58 -- Enrolled copy filed February 8, 1851. (4162)

HB 68 -- An Act to Incorporate the First Congregational Society of Oregon City -- passed by House, February 6, 1851; by Council, February 7, 1851. (2779)
HB 68 -- Enrolled copy filed February 8, 1851. (4166)

CB 8 -- An Act to Incorporate the Trustees of the First Society of the Methodist Episcopal Church in the Town of Salem Oregon Territory -- 1852. (3942)

HB 54 -- An Act to Incorporate the Trustees of the Methodist Episcopal Church in Salem Marion County -- 1853. (4445)

HB 84 -- An Act to Incorporate the First Methodist Episcopal Church of the City of Portland -- passed by House, January 23 (January 25), 1853; by Council, January 26, 1853. (4466)
HB 84 -- Enrolled copy. (4716)

CB 21 -- An Act to Incorporate the Board of Trustees of the Methodist Episcopal Church at Fairfield -- passed by Council, January 24, 1857; by House, January 27, 1857. (7924)
CB 21 -- Enrolled copy filed January 28, 1857. (8424)

CB 39 -- An Act to Incorporate the First Congregational Society at Oregon City -- passed by Council, January 21, 1858; by House, January 29, 1858. (8501 & 8502)
CB 39 -- Enrolled copy. (8989)

Proposed Regulations Governing the Use of Materials and Facilities in the Oregon State Archives

SCOPE OF REGULATIONS

These regulations include policies and procedures governing public use of materials in the custody of the Oregon State Archives. They are promulgated under authority of ORS 192.430 and ORS 357.895 to insure the State's permanently valuable public records are protected from deterioration, mutilation, loss or unauthorized destruction. The regulations are consistent with provisions of ORS 192.410 - 192.500 and are in no way intended to prevent or limit public access to non-restricted information which the records contain. Also covered are policies and procedures governing the use of certain facilities and equipment in the Oregon State Archives.

DEFINITIONS

Legislative Record (ORS 171.410) -- a measure or amendment thereto, a document, book, paper, photograph, sound recording or other material exclusive of personal correspondence, regardless of physical form or characteristics, made by the Legislative Assembly, a committee or employed personnel thereof, in connection with the exercise of legislative or investigatory functions, but does not include the record of an official act of the Legislative Assembly kept by the Secretary of State under section 2, Article VI of the Oregon Constitution.

Public Records (ORS 192.005, § 5) -- a document, book, paper, photograph, file, sound recording or other material, such as court files, mortgage and deed records, regardless of physical form or characteristics, made, received, filed or recorded in pursuance of law or in connection with the transaction of public business, whether or not confidential or restricted in use. "Public records" includes correspondence, public records made by photocopying and public writings, but does not include:

(a) Records of the Legislative Assembly, its committees, officers and employes.

(b) Library and museum materials made or acquired and preserved solely for reference or exhibition purposes.

(c) Extra copies of a document, preserved only for convenience of reference.

(d) A stock of publications.

Public Writings (ORS 192.005, § 6) -- a written act or record of an act of a sovereign authority, official body, tribunal or public officer of this state, whether legislative, judicial or executive.

Agency Records -- semi-current records of public agencies to which the agencies retain legal title and control access and use, but which are in the physical custody of the Oregon State Archives to effect economics and efficiency in storage and use pending their ultimate disposition as authorized by law.

Archives -- non-current public records which the State Archivist has determined to have sufficient legal, administrative or research value or interest to warrant their continued preservation, and which are in the physical and legal custody of the Oregon State Archives.

Materials -- agency records and archives as well as related finding aids and reference works in the Oregon State Archives.

Researcher -- any person who has applied for access to, and use of, materials, and who has been issued a valid researcher identification card.

Search Room -- those areas in the Oregon State Archives which the State Archivist designates for the use of researchers.

AVAILABILITY OF MATERIALS FOR PUBLIC USE

Hours of Use. Except for state holidays and at such other times as specified in writing and posted by the State Archivist, Oregon State Archives will make materials available for use in the Search Room, Monday through Friday, 8:00 A.M. to 5:00 P.M.

Application Procedures. Applicants shall apply in person to the Oregon State Archives and shall furnish, on a form provided for this purpose, information necessary for registration. Applicants shall furnish acceptable identification upon request.

In advance of coming to Salem and applying for the use of materials, Oregon State Archives encourages prospective researchers to determine whether the materials they desire are available and are in a volume sufficient to warrant a personal visit.

Researcher Identification Card. A Search Room attendant shall issue immediately a Researcher Identification Card to each person whose application is approved. This card is valid for one year and may be renewed upon application. Cards are not transferable and shall be shown when requested. Oregon State Archives normally does not approve persons under the age of 16 for a Researcher Identification Card but such persons may have access to materials when accompanied by an adult who holds a valid card and agrees to be responsible for compliance with these regulations.

INFORMATION SERVICES

Priority. Within the limits of available staff resources, Oregon State Archives provides information on a priority basis to official requests from public offi

Information About Materials. Upon request, Oregon State Archives will provide general information about record holdings or specific materials free of charge

Information From Materials. Oregon State Archives normally furnishes information contained in materials in the form of duplicate audio tapes or photocopies of the entire record according to a published duplication and search fee schedule. The State Archivist may limit this activity if the duplication process endangers the physical preservation of the records or if the request will interfere with the staff's ability to serve other researchers. Oregon State Archives does not interpret information contained in the records nor does the staff undertake substantive research for private individuals.

Information From Published Materials. A Search Room attendant will refer persons seeking materials that are published and readily available to the Oregon State Library.

Certification. The State Archivist will certify copies of non-restricted materials in the custody of the Oregon State Archives after payment of a specified fee. Authentication services are not provided.

RESTRICTIONS ON ACCESS

Agency Records. Access to, and use of, agency records will be permitted only to persons which the agency approves and under the access and use restrictions which the agency prescribes.

Archives. Access to, and use of, archives is subject to any restrictions which statute or regulation imposes.

SEARCH ROOM REGULATIONS

Researcher's Responsibility for Materials. Researchers shall acknowledge the receipt of all materials by signature. A Search Room attendant may limit the quantity of materials made available at any one time. Researchers are responsible for all materials delivered to them until they return materials to the Search Room attendant. Researchers shall return materials as soon as use of them is completed, and shall return all materials at the end of the day.

Keeping Materials in Order. Researchers shall keep unbound materials in the order in which a Search Room attendant delivers them and in which they are filed. Researchers shall not rearrange materials appearing to be disordered but shall notify a Search Room attendant about the condition. Researchers shall not remove materials from more than one file folder or container without prior approval.

Preventing Damage to Materials. Researchers shall exercise all possible care to prevent damage to materials. Researchers shall not use fountain pens or "rubber fingers". Materials shall not be written on, leaned on, folded anew, traced, fastened with rubber bands or paper clips, or handled in any other way likely to cause damage. Researchers shall immediately notify a Search Room attendant should damage of any kind occur to any materials. Under no circumstances shall a researcher attempt to repair damage. The use of original records of exceptional value or in fragile condition may be subject to additional conditions which the State Archivist may specify.

Microfilm Copies. Oregon State Archives normally will not provide original materials for research use if a microfilm copy of the materials is available.

Tampering with Materials. Tampering with public records is a Class A misdemeanor. ORS 162.305 defines the crime of tampering. A person tampers if, without lawful authority, he knowingly destroys, mutilates, conceals, removes, makes a false entry in or falsely alters any public record.

Removal of Records. Researchers shall not remove materials from the Search Room. Researchers shall check all parcels and luggage on entering the Search Room and, on request, present for inspection on leaving the Search Room any briefcase, notebook, package, envelope, book or other article which could contain materials furnished for researcher use.

Use of Microform and Sound Recording Equipment. Researchers shall request microform and sound recordings from a Search Room attendant who will instruct the researcher in the proper use of the equipment. Researchers shall operate equipment in a manner which will prevent damage to either the equipment or the record. A Search Room attendant may place time limitations on the use of microform or sound recording equipment in order to permit other researchers access to the machines.

Use of Personal Copying and Recording Equipment. Researchers who wish to use personal typewriters or sound recording devices shall work in areas which a Search Room attendant designates. Only Oregon State Archives staff may photoc documents or duplicate audio recordings and researchers should request these services from a Search Room attendant.

Conduct. Persons are not allowed to eat, drink or smoke in the Search Room. Loud talking or other activity which may disturb researchers is also prohibite

Pets. Persons cannot bring animals into the Oregon State Archives building. Guide dogs for visually impaired persons are exempted from this regulation.

Cameras. Persons cannot take photographs in any areas containing exposed documents unless the State Archivist issues prior approval.

NON-PUBLIC AREAS

Access. Stack areas, processing areas, laboratories and such other parts of the Oregon State Archives building as the State Archivist designates non-public are open only to staff members for the performance of official duties. Other persons are permitted access to non-public areas only under the direct supervision of a staff member and in accordance with all restrictions the State Archivist establishes. All doors leading to non-public areas shall be locked at all times. Persons may not eat, drink or smoke in any area where materials are stored, repaired, processed or used.

MODIFICATIONS AND ADDITIONAL REGULATIONS

The State Archivist may modify or add to these regulations from time to time as he deems necessary and proper to preserve the physical integrity of the archives and protect them from deterioration, mutilation, loss or unauthorized destruction. The State Archivist shall publish all changes and display them prominently in the Search Room.

Proposed Amendment -- ORS 357.825

The following amendment to ORS 357.825 specifically defines the State Archivist's responsibility (as implied under ORS 192.001, § 1, sub-§ c) for insuring the preservation of records having permanent values.

357.825. Acquisition and custody of public records. The State Archivist may negotiate for, acquire and receive public records, writings and illustrative materials of value or interest for legal, administrative or research purposes. He is constituted official custodian of all such records, writings or materials deposited in, acquired for, or transferred upon his requisition to his custody for the state archives, and he shall carefully preserve and protect them from deterioration, mutilation, loss or unauthorized destruction.

TEST FOR PAPER ACIDITY

Twenty documents were selected at random for testing with an "archivist's pen". This test shows the acid content found in paper by a general pH measurement resulting from the action of a colored ink containing brom cresol green.

At least one envelope from each file drawer was chosen; documents were selected from various points in the array within each envelope. Each envelope was also tested and, with the exception of a moderately acid file folder, all envelopes showed a high acid content.

Documents testing showed:

Document No.	Color	Visual Observation	Acid Test Results
1	White	Iron Gall Ink Bleeding	Very slightly acid
1444	White	Iron Gall Ink Bleeding	Slightly acid
1445	White	Somewhat weak	Moderately acid
2327	Blue	Good	No Acid Present
4400	Blue	Multi-paged, good other than cover page	No Acid Present
4401	White	Iron Gall Ink & Pencil	No Acid Present
4402	White	Badly wrinkled	No Acid Present
5979	Blue	Good	No Acid Present
7808	White	Turning Brown	Moderately acid
8611	Blue	Two brown streaks	Very slightly acid
8824	White	Brown circular stains	Very slightly acid
8825	White	Brown circular stains	Slightly acid
8859	White	Good	No Acid Present
9116	Blue	Stains	No Acid Present
9999	White	Turning Brown	Highly Acid
10000	Blue	Good	No Acid Present
11580	White	Good	No Acid Present
11900	White	Good	No Acid Present
14045	Blue	Good	No Acid Present
14131	White	Bound, turning brown, spine needs repair	Moderately acid

Conclusion. Testing results tended to substantiate visual observation for gauging document acidity. Acid content is not a major restoration problem at this time. Documents which are now slightly acid will continue to deteriorate if not deacidified, but this problem is not immediate. Documents which are highly or moderately acid should be considered for deacidification. Acid-free folders should replace high acid content envelopes as soon as possible.

Testing Code

Yellow	Yellowish-Green	Green	Greenish-Blue	Blue
Highly acid	Moderately acid	Slightly acid	Very slightly acid	No Acid Present

TEMPERATURE & RELATIVE HUMIDITY TESTS

Tests using a sling hygrometer measured temperature and relative humidity at various locations in archives storage areas once each morning and once each afternoon. Daily results are listed below. Location #1 is on the main level, west wall; #2 main level near door from processing area; #3 basement level, center of area; #4 basement level near elevator; #5 top floor near microfilm storage area; and #6 near file cabinets containing Provisional and Territorial Governments records. Additionally, a hair hygrothermograph measured conditions at #6 from 2/17/77 to 2/24/77. Temperature varied between 68°F and 69°F and RH moisture maintained 48% level according to this instrument.

DATE	#1	#2	#3	#4	#5	#6
2/18	69° 43%	71° 41%	72° 34%	73° 35%	------	68° 46%
	68° 42%	69° 43%	72° 38%	70° 36%	------	68° 46%
2/22	69° 43%	71° 41%	76° 28%	75° 34%	62° 50%	68° 46%
	69° 43%	71° 41%	72° 41%	71° 45%	63° 46%	68° 46%
2/23	69° 43%	70° 40%	73° 35%	74° 33%	62° 45%	68° 46%
	69° 43%	71° 41%	71° 37%	71° 37%	62° 50%	67° 49%
2/24	70° 40%	71° 41%	74° 33%	73° 35%	62° 45%	67° 49%
	70° 40%	71° 41%	71° 41%	71° 45%	62° 50%	67° 49%
2/25	70° 40%	71° 41%	73° 35%	73° 39%	61° 49%	68° 50%
	69° 43%	71° 37%	71° 45%	74° 36%	63° 46%	68° 50%
2/28	69° 43%	70° 44%	73° 39%	72° 38%	63° 46%	69° 51%
	70° 40%	71° 41%	71° 37%	70° 44%	63° 46%	67° 49%
3/1	69° 43%	70° 44%	74° 36%	73° 35%	62° 50%	69° 51%
	70° 44%	71° 41%	70° 40%	71° 37%	63° 46%	68° 50%

Cost Estimate -- Secondary Processing, Provisional & Territorial Government Records (RG P-9)

The 12,425+ documents (an estimated 38,000 pages) which comprise Record Group P-9 require secondary archival processing to improve access to informational content and conditions for physical preservation.

This secondary processing should include:

(a) removing documents from file cabinets and acid-contaminated envelopes;
(b) ordering documents in correct numerical sequence;
(c) verifying entries on 1931 inventory;
(d) clarifying or adding to 1931 inventory entries where necessary;
(e) analyzing and verifying relationship for all pages attached to numbered documents;
(f) performing simple conservation procedures including flattening, dirt removal, and selective non-aqueous deacidification;
(g) preparing detailed list of documents requiring professional conservation attention;
(h) placing documents in acid-free folders;
(i) labeling folders (by document number) noting number of pages and special conditions;
(j) placing folders in acid-free archival boxes;
(k) labeling boxes;
(l) shelving boxes;
(m) preparing new finding aids in checklist or other appropriate format; and
(n) preparing an informational brochure and public relations material.

The results from this secondary processing should include:

(a) acceptable archival storage for Provisional and Territorial Government records in acid-free containers and a climate-controlled environment;

(b) improved access to informational content through more explicit entries for the 1931 inventory and new finding aids;
(c) a priority list for needed professional conservation work;
(d) a brochure describing the record group for distribution to potential users;
(e) a feasibility report on the application of computer-assisted finding aids for this record group; and
(f) appropriate publicity for the Oregon State Archives in national and regional professional literature and the local press.

The time required to complete the secondary processing activity as outlined above is estimated to be 18 months. The primary cost anticipated for the project is personal services for one experienced archivist. Additional anticipated costs are for acid-free folders and archival containers, conservation supplies and printing the descriptive brochure. Cost estimates assume Oregon State Archives will contribute office space and equipment, sup services and other overhead costs from its current operating budget. Storag will require approximately 114 linear feet of shelving space.

Personal Services (18 months)*	$ 18,504
Supplies**	614
2500 folders	
220 boxes	
oversized boxes & folders	
conservation	
Printing	85
	$ 19,203

*Archivist II, step 2
**All supplies F.O.B. -- acid-free folders and archival boxes estimated from current prices, Hollinger Corporation, Arlington, Virginia.

The need for professional conservation attention varies from document to doc For many, the secondary processing activity will arrest the deterioration p until professional conservators and mass treatments become available. Othe require one or more of the following repair and restoration procedures:

(a) cleaning;
(b) stain removal;
(c) strengthening/mylar encapsulation;
(d) deacidification;

(e) fumigation;
(f) humidification and flattening;
(g) sewing/binding;
(h) tear mending/leafcasting; and
(i) removing adhesives and correcting earlier repair attempts.

If a regional document conservation center becomes available in the Northwest to offer repair and restoration services on an "at-cost" basis, the estimated cost for doing all needed professional conservation work on the Provisional and Territorial Records, given current costs and technology, is $11,183 ($17 per hour). The estimated cost for the same work if contracted to a commercial restoration laboratory, excluding transportation and insurance charges, is $29,610.

Cost Estimate -- Oregon State Archives Conservation Laboratory

Operating a conservation laboratory requires a high degree of technical skill and involves expensive processes. The cost for creating such a laboratory in the Oregon State Archives depends on the level of sophistication at which the laboratory is intended to function. Establishing an "in-house" conservation laboratory is a long-term action as defined in this report and should not be confused with the recommendation to assign staff member responsibility for conservation, initiate preventive conservation measures and provide an "in-house" conservation kit. These latter are short-term actions requiring minimal expenditure of funds.

The cost estimate below is for a paper repair and bindery facility (as opposed to a restoration facility) comparable in sophistication to the present Oregon State Archives Microreproduction Laboratory. Space requirement is 350-400 square feet.

A primary factor determining the success of this conservation laboratory will be the skills of the conservation technician employed. Opportunities, and funds, must be provided for this individual to update current and learn new conservation techniques under the guidance and supervision of professional conservators in "hands-on" situations. This type of training opportunity is not available in the Northwest.

A fully equipped and professionally staffed documents restoration laboratory cannot be justified. A regional cooperative approach to provide this type of facility and conservation expertise is a realistic alternative. Preliminary results from a survey which WILCO is conducting throughout the West indicates substantial interest in examining the feasibility of this regional approach in more detail. Estimated start-up costs for a fully staffed and equipped regional center providing all repair, restoration and conservation services to non-profit organizations and institutions "at cost" is $225,000 - $275,000. The center should be self-supporting at the end of a two or three year period.

Estimated 1st Year Start-up Costs for Oregon State Archives Conservation Laboratory:

Personal Services (one Conservation Technician)	$ 10,668
Consultant Services	1,500
Training Costs (includes travel, living expenses and tuition)	1,950
Resource Library	100
	($ 14,218)

Laboratory Equipment*		$ 5,680
Desk	$ 180	
Chair	130	
File Cabinet	130	
Bookcase	75	
Steel Shelving	65	
Small Press	Have	
TALAS Books Press	55	
Press Boards	70	
Work Bench w/ drawers & cabinets (custom)	1,000	
Calculator	25	
Fume Hood	1,200	
Stainless Steel Sink 36" x 60" w/drying board	900	
Drum Dryer	360	
Pettifogger (custom)	250	
Drying Racks	220	
Board Cutter	50	
Job Backer	200	
Large Table 4' x 5'	250	
Work Stool	30	
Plastic Trays 20" x 24"	110	
Glue Pot, 1 qt.	40	
Sewing Frame, 80"	90	
Assorted Hand Tools	250	
Chemicals & Supplies	600	
TOTAL		$ 20,498

Estimated 2nd Year Cost

Personal Services	$ 11,208
Consultant Services	750
Training	1,000
Resource Library	75
Laboratory Equipment & Tools	500
Chemicals & Supplies	600
TOTAL	$ 14,133

*Price estimates do not include transportation and installation costs. Additional equipment such as sheet former (estimated $800 w/accessory equipment) may be required depending on the level of sophistication desired.

Cost Estimate -- Protecting Record Material for Harmful Light

Ultraviolet radiation emitted by sunlight and fluorescent light damages record materials. Use of filters lessens this damaging effect substantially. Neutral gray glazing for windows and white paint containing titanium dioxide are also effective in absorbing harmful ultraviolet radiation. This is the suggested alternative for controlling sunlight from stack area windows.

Cost estimates* for protective filtering materials are:

Roll format (for windows)	$125 for roll, 25' x 5'
Fluorescent Tube Filters	85¢ each for the first 100 -- 80¢ each for additional filters in lots of 100

For each area of the Oregon State Archives where records are stored or used, the number of 48" tube filters and square feet of window opening through which sunlight enters are listed. Staff should be instructed to turn off lights in storage areas when no one is working in them to further reduce light damage (and electricity charges).

Maximum estimated cost to shield window openings and provide fluorescent tube filters throughout the entire Archives and Records Center facility is $1318; for Archives storage, processing and Search Room areas only, the estimate is $380. These estimates do not include shipping charges. Lower prices may be available for quantity orders.

Basement Stack

Window Opening -- 25 sq.ft.
No Fluorescent Lights --
(incandescent lights do not emit harmful ultraviolet radiation)

Archives Stack

Window Opening -- 50 sq.ft.
Tube Filters -- 148

Archives Vault

Tube Filters -- 16

Microfilm Laboratory

Tube Filters -- 8

Processing Area	
	Tube Filters -- 44
Conference Room	
	Tube Filters -- 48
Search Room	
	Window & Door Opening -- 70 sq.ft.
	Tube Filters -- 92
Record Center Office	
	Window Opening - 15 sq.ft.
	Tube Filters -- 72
Records Center Stack, 3rd Floor	
	Window Opening - 86 sq.ft.
	Tube Filters -- 356
Records Center Stack, 4th Floor	
	Window Opening - 122 sq.ft.
	Tube Filters -- 380
Security Microfilm Vault	
	Tube Filters -- 8

*Cost estimate is for products of Solar-Screen Company, Corona, New York. Prices are F.O.B.

Suggested "In-House" Conservation Kit

WARNINGS:

Some chemicals and materials may pose health hazards. Directions for use should be strictly followed.

Many conservation procedures are, with proper training, within the capabilities of staff to administer. Others require professional restoration attention. When there is any doubt, a professional conservator should be consulted.

Test all procedures prior to initiating use if there is any chance that the planned procedure might alter or damage the document. Never do anything that cannot be undone. Don't guess, test.

Testing Materials and Equipment

Sling hygrometer
EM Non-Bleeding pH Indicators (or similar)
Barrow Laboratory Spot Test Kit
Archivist Pen
Humidity Indicator Papers
Sulphur Dioxide Indicator Papers
Thermometers
Relative Humidity Indicators

Tools

Bone Folders
Scapel and Blades
Spatula
Steel Ruler
Steel Square
Paste Pot
Paste Brushes
Camel Hair Brushes
Tweezers
Lifting Knife
Sprayers
Iron
Small Press and Press Boards
Plastic Gloves
Work Apron
Scissors
Plastic Trays (ABS Polymer)
Brayer
Squeegee

Cleaning and Restoration Supplies

Cheesecloth
"One-Wipe" Dust Cloth
Plastiklips
Q-tips
Lens Paper
Facial Tissue
Silicone Release Paper
Wax Paper
Filmoplast P Tape
Dennison's Gummed Paper (glassine)
Troya 6-12 Paper (or similar for making mends)
Blotters

Cleaning and Restoration Supplies (cont.)

Erasers
- (a) Pink-Pearl #101
- (b) Ruby Red
- (c) Magic Rub #1954
- (d) Art Gum

Opaline Cleaning Pad
Acid-free folders, boxes, wrapping paper, etc.
Heat Set Tissue and Nylon Gossamer Web or
Nylon Gossamer Heat Set Fabric
Graph Paper
Glass, 24" x 36"
3M #415 Double Face Tape or similar
Mylar - Type S
Cotton Tape

Chemicals and Compounds

Wheat Paste #30
Methyl Cellulose
Potassium Lactate (leather protector)
Leather Dressing
Demco Book Cleaner
Krylon #1301
Wei T'O Spray Deacidifier
Club Soda
Milk of Magnesia
Interleaf VDP Papers
Distilled Water
Thymol

Selected List of Conservation Materials Suppliers *

TALAS
Division of Technical Library Service
104 Fifth Avenue
New York, NY 10011
Attn: Elaine Haas
(complete line of bookbinding, conservation and archives supplies)

James River Paper Company
Tredegar Road
Richmond, Virginia 23217
(blotters)

Transilwrap Corporation
2741 North 4th Street
Philadelphia, Pennsylvania 19133
(3 & 5 mil Type S Mylar)

Process Materials
329 Veterans Boulevard
Carlstadt, NJ 07072
(heat set nylon; nylon webbing)

Charles T. Bainbridge's Sons
20 Cumberland Street
Brooklyn, NY 11205
(mat & mounting board)

Hollinger Corporation
P.O. Box 6185
3810 South Four Mile Run Drive
Arlington, Virginia 22206
(acid-free folders and storage containers, etc.)

Interleaf, Inc.
2300 East 26th Street
Minneapolis, Minnesota 55406
(vapor phase deacidification papers)

Demco Educational Corp.
2120 Fordham Avenue
Madison, Wisconsin 53701
(book cleaner for cloth covers)

Glass Distributors, Inc.
1741 Johnson Avenue, N.W.
Washington, D.C. 20009
(UF-3 Plexiglass)

Solar Screen Company
53-11 105th Street
Corona, NY 11368
(ultraviolet filters for fluorescent tubes)

Applied Science Laboratory
218 No. Adams Street
Richmond, Virginia 23220
(Barrow Laboratory spot test kits)

---

* For more detailed listing see: Cunha, Conservation of Library Materials, Vol. 1, 280-300.

SELECT CONSERVATION BIBLIOGRAPHY

Banks, Paul N. "Cooperative Approaches to Conservation," Library Journal 101:2348-2351 (November 15, 1976).

Banks. "Paper Cleaning," Journal of the Guild of Book Workers 5:8-22 (Fall, 1966). Reprinted in Restaurator 1:52-56 (1969).

Barrow, W. J. "Archival File Folders," American Archivist 28:125-128 (January, 1965).

Barrow. "Cleaning of Documents," Archivum 8:119-123 (1956).

Barrow. Manuscripts and Documents: Their Deterioration and Restoration. 2nd ed. Charlottesville: University of Virginia Press, 1972.

Browning, B. L. "The Nature of Paper," Library Quarterly 40:18-38 (January, 1970).

Capps, Marie T. "Preservation and Maintenance of Maps," Special Libraries 63:457-462 (October, 1972).

Cockerell, Douglas. Bookbinding and the Care of Books. 5th ed. London: Pitman, 1955.

Cockerell, Sidney M. The Repairing of Books. London: Sheppard Press, 1958.

Cunha, George M. and Dorothy Grant Cunha. Conservation of Library Materials. 2nd ed. Metchuen, N.J.: Scarecrow Press, 1971.

Cunha, G. M. and Norman Tucker. Library and Archives Conservation. Boston: The Boston Athenaeum, 1972.

Darling, Pamela W. "A Local Preservation Program: Where to Start," LJ 101:2343-2347 (November 15, 1976).

Darling, "Preservation: A National Plan at Last?" LJ 102:447-449 (February 15, 1977).

Evans, Frank B., comp. Modern Archives and Manuscripts: A Select Bibliography. Chicago: Society of American Archivists, 1975.

Haas, Warren J. Preparation of Detailed Specifications for a National System for the Preservation of Library Materials: Final Report. Washington: Association of Research Libraries, February, 1972. Published as ERIC Document, ED 060 908.

Horton, Carolyn. Cleaning and Preserving Bindings and Related Materials. Chicago: American Library Association, 1969.

Kane, Lucille. A Guide to the Care and Repair of Manuscripts. 2nd ed. Nashville: American Association for State and Local History, 1972.

LeGear, H. M. Maps: Their Care, Repair and Preservation in Libraries. Washington: Library of Congress, 1950.

Lowell, Howard P. Public Library Materials Conservation Project. Boston: Massachusetts Bureau of Library Extension, June 30, 1975. Published as ERIC Document, ED 108 696.

Manual for Fire Protection for Archives and Records Centers. Boston: National Fire Protection Association, 1972. Promulgated as NFPA Standard #232-AM.

Middleton, Bernard C. The Restoration of Leather Bindings. Chicago: American Library Association, 1972.

Minogue, Adelaide E. The Repair and Preservation of Records. Washington: National Archives, September, 1943. Published as #5, Bulletins of the National Archives.

Minogue. "Some Observations of the Flattening of Folded Records," AA 8:115-121 (April, 1945).

Morrison, Robert M., ed. Conservation Administration. North Andover, Mass.: New England Document Conservation Center, 1975.

Poole, Frazer G. "Preservation and Cost Standards," SL 59:614-619 (October, 1968).

Rhoads, James B. "Alienation and Thievery: Archival Problems," AA 29:197-208 (April, 1966).

Smith, Richard D. "New Approaches to Preservation," LQ 40:139-171 (January, 1970).

Smith. "Preservation: The Deacidification of Paper and Books," American Libraries 6:108-110 (February, 1975).

Tauber, Maurice F., ed. Library Binding Manual. Boston: Library Binding Institute, 1972.

Waters, Peter. Procedures for Salvage of Water-Damaged Library Materials. rev. ed. Washington: Library of Congress, 1975.

Winger, Howard W. and R. D. Smith, eds. Deterioration and Preservation of Library Materials. Chicago: University of Chicago Press, 1970.